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WO 2005/054265 A3

(54) Title: POLYKETIDES AND THEIR SYNTHESIS

(57) Abstract: Macrolides particularly erythromycins and azithromycins, having O-mycaminosyl or O-angulosaminyl groups, particularly at the 5-position, are produced using a gene cassette comprising a combination of genes which, in an appropriate strain background, are able to direct the synthesis of mycaminose or angulosamine and to direct its subsequent transfer to an aglycone or pseudoaglycone. Synthetic genes may comprise one or more of angMIII, angMI, angB, angAI, angAII, angorf14, angorf4, tylMIII, tylMI, tylB, tylAI, tylAII, eryCVI, spnO, eryBVI, eryK, tyl Ia and ery G. Glycosyltransfer genes may comprise one or more of eryCIII, tylMII, angMII, desVII, eryBV, spnP and midI